

REMARKS:

I. IDS:

Upon further review, it appears that the IDS included with the previously-filed Response to Office Action inadvertently omitted U.S. Patent Application No. 10/770,881 (U.S. Patent Application Publication No. 2005/0172014). As such, an IDS is submitted herewith. The identified application is referenced in the instant application on p. 11 of the specification. It is expressly noted that no admission is made regarding any alleged application or use of this reference as prior art against the instant patent application.

II. CLAIM AMENDMENTS

Claims 31 and 43 are amended for purposes of clarity. No new matter is added.

III. INTERVIEW

A telephone interview was conducted on August 31, 2009. An interview summary is provided on the preceding page.

IV. CLAIM REJECTIONS:

Claims 1-16 and 31-59 are currently pending, with claims 1, 16, 31 and 43 being independent claims. Claims 17-30 were previously canceled without prejudice or disclaimer.

The allowance of claims 1-16 and 43-59 is noted with appreciation.

The first rejection noted below (A) will be considered as a §103(a) obviousness rejection since two references are cited. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in **a single prior art reference.**" See

MPEP §2131.

- (A) The Examiner rejected claims 31 and 32 under 35 U.S.C. §103(a) as being anticipated by *Yegin* (U.S. Patent No. 7,376,097) in view of *Warrier et al.* (U.S. Patent No. 6,684,256, referred to below as "*Warrier*"). *See pp. 3-5 of the Office Action.*
- (B) The Examiner rejected claim 33 under 35 U.S.C. §103(a) as being unpatentable over *Yegin* in view of *Warrier* and further in view of *Chiou et al.* (U.S. Patent No. 6,473,413, referred to below as "*Chiou*"). *See pp. 5-6 of the Office Action.*
- (C) The Examiner rejected claims 34 and 35 under 35 U.S.C. §103(a) as being unpatentable over *Yegin* in view of *Kato et al.* (U.S. Patent No. 6,646,999, referred to below as "*Kato*"). *See pp. 6-7 of the Office Action.*
- (D) The Examiner rejected claims 36-38 under 35 U.S.C. §103(a) as being unpatentable over *Yegin* in view of *Warrier* and further in view of *Chiou*. *See pp. 7-9 of the Office Action.*
- (E) The Examiner rejected claims 39-42 under 35 U.S.C. §103(a) as being unpatentable over *Yegin* in view of *Warrier* and further in view of *Ernst et al.* ("Network Mobility Support Terminology," 2002, referred to below as "*Ernst*"). *See pp. 10-12 of the Office Action.*

These rejections are respectfully disagreed with and are traversed below.

A. EXEMPLARY EMBODIMENTS OF THE INSTANT APPLICATION

At page 6, line 24-page 7, line 2 of the specification, it is stated:

In one aspect this invention provides a system and a method to manage addresses in a network. The method includes connecting a MR, also referred to herein as a gateway mobile terminal, of a MONET to an access point AP of an AN that includes an AR; making a request to obtain a plurality of link addresses from a

link address manager of the AN; allocating individual ones of the plurality of link addresses to individual ones of network nodes of the MONET; and performing a neighbor discovery procedure with the AR to send at least one neighbor advertisement to declare the allocated individual ones of the assigned plurality of link addresses.

Thus, at least some exemplary embodiments of the invention function as follows. A mobile router (MR), also referred to as a gateway mobile terminal, serves as the gateway for a mobile network (MONET) that includes a number of nodes (e.g., mobile nodes, terminal devices). The MR sends a request to a link address manager of an access network (AN). The request is to obtain a plurality of link addresses. Once the MR receives a response (e.g., a response from the link address manager providing a plurality of link addresses), the MR allocates individual ones of the link addresses to individual ones of the nodes of the MONET. In such a manner, the MR assists in the provisioning and management of link addresses for the nodes of the MONET.

It is briefly noted that none of the cited prior art (*Yegin, Chiou, Ernst, Kato, Warriar*), considered separately or in combination, discloses or suggests such functionality (e.g., for a gateway mobile terminal). None of the cited prior art discloses or suggests managing information for a plurality of link addresses that are subsequently assigned (e.g., by a gateway mobile terminal) to nodes of a mobile network. Arguments with respect to specific references and specific claim language are presented in further detail below.

B. CLAIM 31

Amended claim 31 recites:

A mobile station comprising: a transceiver configured to enable communication such that **the mobile station functions as a gateway mobile terminal for being coupled between at least one Mobile Network Node (MNN) and an access point (AP) of an access network (AN), where the mobile station and the at**

least one MNN belong to a mobile network; and a data processor configured, in response to the mobile station connecting to the AP, to send a request for information to a link layer address (LLA) manager of the AN, wherein the information relates to a plurality of LLAs, and **wherein the data processor is further configured, in response to receiving a response to the request, to allocate individual ones of the plurality of LLAs to individual ones of the MNNs.**

In the Abstract and Summary sections, *Yegin* states:

This invention relates generally to a method of associating an IP address with a link layer address in a wireless communication network. The method comprises the steps of assigning an IP address to a plurality of link layer addresses; establishing a link layer connection with a first wireless network interface on the IP address; and establishing a link layer connection with a second wireless network interface on the IP address. The method of the present invention enables the increased downloading of data to a client device by aggregating data links associated with an IP address. The method also enables the bi-casting of data to a client device from an IP address associated with a plurality of link layer addresses of wireless communication device. Finally, the invention enables failure recovery by enabling downloading to a second link layer address if a communication link to a first link layer address deteriorates.

Yegin discloses associating an IP address with a plurality of link layer addresses. *Yegin* asserts that this functionality provides benefits, such as: "enabl[ing] the increased downloading of data to **a client device** by aggregating data links associated with an IP address," "enabl[ing] the bi-casting of data to **a client device** from an IP address associated with a plurality of link layer addresses of wireless communication device," and "enabl[ing] failure recovery by enabling downloading to a second link layer address if a communication link to a first link layer address deteriorates."

The architecture of the system of *Yegin* is apparent from FIGS. 1 and 2 wherein "[a] client host 102 is coupled to an access point 104 by a wireless communication link 106. The access point 104 is coupled to an access router 108 by a communication link 110. The access router 108 is coupled to a communication network, such as the Internet 112." *See col. 3, lines 12-18.*

Yegin does not disclose or suggest "**the mobile station functions as a gateway mobile terminal for being coupled between at least one Mobile Network Node (MNN) and an access point (AP) of an access network (AN)**," as recited in claim 31. The client host 102 of *Yegin* is a terminal device – there are no additional client hosts that communicate with the access point 104 via the client host 102. In fact, *Yegin* discloses no interrelation among any plurality of client hosts. *Yegin* does not disclose or suggest the presence or usage of "a gateway mobile terminal," let alone one that is coupled between at least one MNN and an AP of an AN. *See FIGS. 1 and 2 of Yegin.*

It is noted that *Warrier* also does not disclose this functionality. At col. 1, lines 25-28, *Warrier* notes that: "Typically, foreign agent functionality is incorporated into a network access server chassis located on a mobile node's visited network." Clearly the foreign agent of *Warrier* (e.g., no. 13 in FIG. 1) is not a mobile station or a gateway mobile terminal.

Neither *Yegin* nor *Warrier*, considered separately or in combination, discloses nor suggests "**where the mobile station and the at least one MNN belong to a mobile network**," as recited in amended claim 31. *Yegin* and/or *Warrier* do not disclose or suggest the presence or usage of any mobile network. Furthermore, neither *Yegin* nor *Warrier* discloses any functionality with respect to a mobile network.

The Examiner admitted that *Yegin* does not disclose or suggest "wherein the data processor is further configured, in response to receiving a response to the request, **to allocate individual ones of the plurality of LLAs to individual ones of the MNNs**," instead citing *Warrier* at col. 4, lines 45-67.

This portion of *Warrier* relates to registration of a mobile node with the foreign agent. *Warrier* discloses saving the home network IP address, home agent IP address and PPP link address in a tunneling table. *See FIG. 2. Warrier* does not disclose or suggest allocating anything. At most, *Warrier* discloses **associating** various types of information. *See col. 4, lines 6-27.*

It is also briefly noted that *Warrier* does not disclose or suggest "a data processor configured, in response to the mobile station connecting to the AP, **to send a request for information to a link layer address (LLA) manager of the AN, wherein the information relates to a plurality of LLAs**" (as recited in claim 31), nor did the Examiner argue otherwise.

The features recited in claim 31 are not disclosed or suggested in the cited art. *Yegin* in view of *Warrier* certainly cannot be seen to render claim 31 obvious. Therefore, claim 31 is patentable and should be allowed.

C. CLAIMS 32-42

Though dependent claims 32-42 contain their own allowable subject matter, these claims should at least be allowable due to their dependence from allowable claim 31.

While this Response is deemed to be fully responsive to the objections and rejections in the outstanding Office Action, the Applicants respectfully reserve the right to further argue one or more of the dependent claims when responding to any future actions, such as when responding to further Office Actions or in an Appeal Brief.

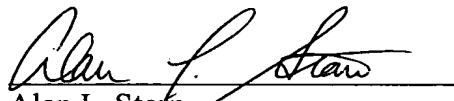
Dependent claim 32 recites: "A mobile station as in claim 31, where said data processor is operable to perform a neighbor discovery procedure with an access router (AR) of the AN **to send at least one neighbor advertisement to declare an LLA allocated to the at least one MNN.**"

Since *Yegin* and/or *Warrier* do not disclose or suggest allocating link layer addresses, they cannot be seen to disclose or suggest the subject matter recited in claim 32 as it relates to "**declaring an LLA allocated to the at least one MNN.**" Claim 32 is further patentable and should be allowed.

IV. CONCLUSION

The Examiner is respectfully requested to reconsider and remove the rejections of claims 31-42 and to allow all of the pending claims as now presented for examination. For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Should any unresolved issue remain, the Examiner is invited to call Applicants' agent at the telephone number indicated below.

Respectfully submitted:


Alan L. Stern
Reg. No.: 59,071

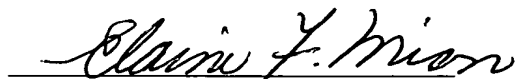
September 1, 2009
Date

Customer No.: 29683

HARRINGTON & SMITH, PC
4 Research Drive
Shelton, CT 06484-6212
Telephone: (203) 925-9400 ext. 18
Facsimile: (203) 944-0245
E-mail: astern@hspatent.com

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